China Rare Earth 0769 HK

BASIC MATERIALS | CHINA

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Key findings

Business model

Financial strength

Corporate governance

Investment liquidity

Volatility

Earnings/cashflow growth

Earnings/cashflow quality

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China Rare Earth (CRE)'s share price has doubled since September 2010, owing

to China's setting an export quota, which has led to rising prices in many rare earth materials. CRE does not own rare-earth mining assets; it is rather a material processor; these tend to benefit from inventory gains when raw material prices rise (and vice versa). For FY10F and FY11F, the stock is trading at 26x and 17.7x P/E, and at 2.3x/2.1x P/BV, on an ROE of 8.7% and 11.8%, all on consensus figures.

STRONG

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NUGGETS

Non-rated ideas from Nomura

Company description

China Rare Earth Holdings Limited, through its subsidiaries, refines and wholesales rare earth products and refractory products.

Closing price on 12 October HK\$4.43

The upper crust

1 Rare earths: China's indigenous precious metal

As Nomura's Asia Pacific Strategist, Sean Darby, laid out in *Rare Earths: China's indigenous precious metal (II)*, 10 October, 2010, there is a significant supply-demand imbalance appearing in the minor metals including rare earth metals. Given the dependence of Asia's electronic, super-alloys and auto industry players on minor metals and the even smaller group of rare earth metals, companies with exposure to rare earths stand to benefit, in our view.

2 Rare earth processor

CRE is the largest highly purified rare-earth oxide producer in China, which translates to a 20% global market share. As a Cayman-registered company, CRE may not own or mine rare earths in China. However, the company has been looking at M&A elsewhere, but notes it has not come across anything at a reasonable price. CRE expects increasing applications for these materials to boost long-term prices, and expects China to clamp down further on export quotas.

③ Refractory materials to see slow recovery

Despite the volatile earnings in rare earths, margins at refractory materials have been steadier at around 30%. CRE has guided for a slow demand recovery amid a challenging steel and glass industry in China. "Refractory" materials are simply substances that can withstand very high temperatures, beginning at 1000 °F — graphite, for example.

④ Valuation

CRE suggested that the 1H:2H earnings distribution is usually 2:3. Based on this, CRE is likely to report full-year net profit of HK\$95mn (vs FY09F net of HK\$86.7mn, EPS HK5.75¢). According to Bloomberg consensus, CRE is trading at an FY10F-11F P/E of 24.9x and 17.0x.

Key financials

LIMITED

LOW HIGH

HK\$mn	FY06	FY07	FY08	FY09
Revenue	1,031	1,385	1,365	1,212
Reported net profit	210.0	295.0	(172.0)	84.0
Reported EPS (HK\$)	0.18	0.21	(0.12)	0.06
Rep EPS growth (%)	36	16	nm	nm
Rep P/E (x)	24.6	21.3	nm	77.0
Price/book (x)	2.8	2.5	2.6	2.5
Dividend yield (%)	1.1	1.1	0.2	0.0
ROE (%)	11.5	12.5	(6.9)	3.3
Net debt/equity (%)	Net	Net	Net	Net
	cash	cash	cash	cash

Source: Company data

Share price relative to MSCI China



Source: Bloomberg

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13 October 2010

Drilling down

Company profile

China Rare Earth Holdings Limited (CRE), through its subsidiaries, manufactures and wholesales rare earth products and refractory products. It is the largest highly purified rare-earth oxide producer in China. Some 64% of CRE's 1H10 revenues came from rare earth, 36% from refractory materials.

The largest company of its kind in China

1H10 earnings review

 CRE reported 1H10 net profit of HK\$63.5mn (EPS HK3.96¢), vs HK\$20.6mn in 1H09 (EPS HK1.48¢). This flowed from an increase in ASP and sales volume, as well as margin improvement (gross margin was 23% in 1H10 vs 17% in 1H09).

1H10 net profit has nearly tripled
since 1H09

Exhibit 1. CRE: summary 1H10 results							
(HK\$mn)	1H10	1H09	y-y chg (%)				
Sales	599	500	19.8				
Gross profit	139	85	63.5				
Pre-tax profit	83	41	102.4				
Net profit	64	21	204.8				
EPS (HK¢)	3.96	1.48	167.6				
Margin (%)							
Gross margin	23.2	17.0					
Net margin	10.7	4.2					
Tax rate	22.9	48.8					

Source: Company data

Rare earth

- Total shipments were 1,600 tonnes (up 60% y-y), including rare earth oxides and downstream products;
- Rare earth sales were HK\$384mn in 1H10 (64% of total 1H10 sales) 83% rare earth sales to China, 9% to Europe, 4% to Japan, and 4% others;
- Rare earth oxides shipments were 1,400 tonnes (up 70% y-y).

Refractory materials

- Refractory materials sales in 1H10 were down 10% y-y to HK\$215mn (36% 1H10 sales), including high-temperature ceramics and magnesium grains;
- Some 80% of sales in China, 20% to Japan and Europe;
- 1H10 gross margin was 33% (vs overall average of 23%).

Growth strategies

Rare earth

- CRE focuses on high-purity rare earth oxide (20% global market share, according to CRE);
- Through its 95%-holding in Xinghua Rare Earth (unlisted), a manufacturer and distributor of upstream rare earth products, CRE has moved up in the value chain;
- CRE aims to be an integrated rare earth producer (except for mining, which is only allowed to local Chinese company), to cover rare products from upstream to downstream;
- Florescent materials: joint venture with OSRAM is expected to commence trial operation by spring 2011. According to Lynas (LYC AU), "the compact fluorescent lamp (CFL) uses only a quarter of the power needed to produce the same amount of light as the standard incandescent light bulb.";

Some 80% of sales in China

Nomura

•	CRE, a Cayman registered company, cannot own rare-earth mining assets in China CRE, however, has been looking acquisition opportunities overseas but, according to CRE, has not come across anything at a reasonable price.

Refractory materials

China Rare Earth

- Strategies here count:
- Expanding the magnesium grains business and actively exploring new raw material sources to support mass production;
- Expanding the product range to penetrate high-margin products as opportunities arise.

Industry update/outlook

Rare earth

- China is the largest rare-earth producer, on a 95% global market share owing to cost efficiency and quality and it has 52% of the world's rare earth reserves, according to National Development and Reform Commission (NDRC) of China;
- Rare earth mining rights are mostly controlled by local/provincial governments in China:
- Guangdong, Hunan, and Inner Mongolia are the key rare earth producing provinces in China, but mines in Guangdong and Hunan have a higher chemical content (10-plus types) than in Inner Mongolia (only about four types);
- Price and sales volume of rare earth products recovered as demand rebounded as the global financial crisis eased;
- CRE believes the Chinese government will tighten export quotas for rare earth products, according to CRE;
- In, Rare Earths: China's indigenous precious metal, regional strategist Sean Darby, China has become more said "over the past few three years, China has sought to curb production in order to protective of its rare earths ... safeguard resources and perhaps in recognition of the fact that rare earths had been sold without reference to their strategic value.";
- "Almost unnoticed, China has closed a number of smaller mining ventures and begun a round of consolidation during the past few years.";
- China's rapid growth in rare growth consumption shows, "China's growth in consumer electronics and higher-value-added alloys over the past decade. China has warned in the past that its own industrial demand might lead it to stop exporting rare earths altogether."

Refractory materials

CRE suggested slow demand recovery owing to a challenging operating environment of the steel and glass industry in China.

Summary valuation on Bloomberg consensus

CRE suggested that 1H:2H earnings distribution is usually 2:3. Based on that, CRE is likely to report full-year net profit of HK\$95mn (vs FY09F net income of HK\$84mn, EPS HK5.75¢).

China has a 95% market share in rare earths and more than half the world's reserves of rare earth ...

... and this wealth is in the hinterland

... it may even stop exporting altogether to feed its own industry

Linked to steel and glass

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Cayman listing precludes certain

asset ownership in China

Josephine Ho

mining assets in China.

Josephine Ho

Exhibit 2. CRE: summary valuation on Bloomberg consensus					
Valuation	FY10F	FY11F			
P/E (x)	26	17.7			
Price/sales (x)	4.0	3.5			
P/BR (x)	2.3	2.1			
Dividend yield (%)	0.9	1.4			
Pricing as of 12 October 2010 market close					

Pricing as of 12 October, 2010, market close Source: Bloomberg

Exhibit 3. China Rare Earth one-year forward P/E chart



Source: Bloomberg, Nomura research

Exhibit 4. China Rare Earth one-year forward P/BV chart



Source: Bloomberg, Nomura research

Rare earth 101 (summarised from Lynas (ASX:LYC) website)

What are they?

Rare Earths are a moderately abundant group of 15 metallic elements known as the Lanthanide series (atomic numbers 57 through to 71) plus Yttrium (39). Although Scandium (atomic number 21) is not a true Rare Earth element, it is commonly included with the Lanthanides because of its similar properties.

The 15 lanthanides are represented by the single square of lanthanum in the main part of the periodic table and listed in a separate sub group below the main groupings.

These are a small group of metallic elements

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Where do they come from?

Rare Earths are not found as free metals in the earth's crust, rather within a mixed 'cocktail' of Rare Earth elements that need to be separated for their individual or combined commercial use. Despite their name, Rare Earths are relatively abundant in the earth's crust, however are often of low quality and rarely presented in economic concentration.

What do they do?

- Enhancing environmental protection: rare earths play a vital role in the reduction of green house gas emissions;
- Enabling digital technology: new materials and novel applications of them enable companies to produce more efficient, higher performance materials which meet the demand for faster, smaller and lighter products;
- Improving energy efficiency: Rare Earths are supporting the uptake of energy
 efficient initiatives through their distinctive physical and chemical properties, which
 allow them to; help protect the environment by lowering energy consumption; and
 improve lifestyles through energy efficient alternatives that save money without
 sacrificing comfort and reliability.

Rare earth production process

- 1) Rare earth raw material (ore) ->
- 2) Up-stream products: rare earth chloride, rare earth salt, rare earth concentrate ->
- 3) Mid-stream products: high purity rare earth oxide (CRE's position) ->

4) **Downstream products**: rare earth fluorescent material, rare earth magnetic material, rare earth energy material, rare earth functional material ->

5) **Rare earth materials**: polishing agent, trichromatic phosphor, catalyst, permanent magnetic materials ->

6) Applications: CRT, LCD, optics, batteries

Exhibit 5. Price summary for selected rare earth oxide production

Rare Earth Oxide (US\$/kg, FOB China)	2007	2008	2009	Q1 2010	Q2 2010	5/10/2010
Lanthanum Oxide	3.44	8.71	4.88	6.08	7.49	42
Cerium Oxide	3.04	4.56	3.88	4.46	6.42	38
Neodymium Oxide	30.24	31.9	19.12	27.56	33.2	75
Praseodymium Oxide	29.05	29.48	18.03	26.13	33.07	72
Samarium Oxide	3.6	5.2	3.4	3.4	3.4	35
Dysprosium Oxide	89.1	118.49	115.67	156.5	200.5	305
Europium Oxide	323.9	481.92	492.92	512.4	529.8	615
Terbium Oxide	590.4	720.77	361.67	478.9	538.5	615

* price for a 'standard' 99% purity of individual elements

Source: Lynas

Rare earths are not so much rare as difficult to define

As a common theme rare earths, conduct electricity well and this makes them "green"

Financial statements

FY05	FY06	FY07	FY08	FY09
769	1,031	1,385	1,365	1,212
-565	-733	-931	-1016	-980
204	298	454	349	232
-37	-46	-78	-165	-97
167	252	376	184	135
228	324	461	280	266
-61	-72	-85	-96	-131
167	252	376	184	135
2	7	12	-1	-8
3	15	8	-302	17
172	274	396	(119)	144
-40	-62	-97	-54	-60
132	212	299	(173)	84
-1	-2	-4	1	0
131	210	295	(172)	84
	769 -565 204 -37 167 228 -61 167 2 3 172 -40 132 -1	769 1,031 -565 -733 204 298 -37 -46 167 252 228 324 -61 -72 167 252 2 7 3 15 172 274 -40 -62 132 212 -1 -2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7691,0311,3851,365-565-733-931-1016204298454349-37-46-78-165167252376184228324461280-61-72-85-961672523761842712-13158-302172274396(119)-40-62-97-54132212299(173)-1-2-41

Source: Company data

Balance sheet (HK\$mn)					
Year-end	FY05	FY06	FY07	FY08	FY09
Cash and Cash Equivalents	153	661	652	765	1,065
Total receivables	430	557	484	510	553
Inventory	228	231	296	309	235
Other Current Assets	1	106	104	130	15
Total Current Assets	812	1,555	1,536	1,714	1,867
Net fixed assets	570	569	744	715	636
Other long-term investments			25		
Goodwill and Intangible Assets	200	202	207	465	435
Land-use Right	12	139	160	262	257
Other Non-current Assets		1	127	58	45
Total Non-current Assets	782	911	1,262	1,501	1,373
Total Assets	1,594	2,465	2,798	3214	3,240
Accounts and notes payable, net	56	50	62	116	77
Accrued taxes	32	36	39	10	19
Short-term borrowings		95	101	140	108
Other Current Liabilities	57	46	46	213	54
Total Current Liabilities	145	227	248	479	258
Long-term debt and capital leases				155	136
Other Non-current Liabilities				106	98.000
Total Non-current Liabilities				261	234
Total Liabilities	145	227	248	741	491
Common stock	99	142	142	142	155
Reserve	1,331	2,075	2,380	2,302	2,564
Total common equity	1430	2217	2522	2444	2719
Minority Interest	19	21	28	29	29
Shareholders' Equity, Total	1,449	2,238	2,550	2,474	2,748
Total liabilities and shareholders' equity	1,594	2,465	2,798	3,214	3,240

Source: Company data

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China Rare Earth Previous Rati		46.70 USD	12 Oct 2010	Not Rated	n/a	-
Issuer				Pr	evious Rating	Date of change
China Rare Earth				No	t Rated	n/a

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